



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

09/582,386

11/10/2000

Thomas Anthony Stahl

RCA88884

3550

7590

07/07/2004

Joseph S Tripoli
Thomson Multimedia Licensing Inc
P O Box 5312
Princeton, NJ 08540

EXAMINER

NGUYEN, HUY THANH

ART UNIT

PAPER NUMBER

2615

9

DATE MAILED: 07/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/582,386

Applicant(s)

STAHL, THOMAS ANTHONY

Examiner

HUY T NGUYEN

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

• Art Unit: 2615

DETAILED ACTION

Claim Objections

1. Claim 5 is objected to because of the following informalities: in claim 5, lines 4, it is unclear whether "thereto" referencing to a digital television or a video disc player being recited at lines 1-3. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Gadre et al (5,965,161).

Regarding claims 1 and 3 Gadre discloses a method for operating a digital video disc player interconnected by a digital bus to a digital video processing apparatus (TV 18, Fig. 1) , the digital video processing apparatus performing the steps, of

Art Unit: 2615

(a) receiving from a digital video disc player a program content stream representative of a programmed event, said program content stream including data in a compressed format (DVD digital video)(column 3, lines 35-65) (b) decoding (23) said program content stream in said digital apparatus ; characterized by:

(c) receiving from said digital video disc player bit-map data representative of a subpicture associated with said program content stream (column 6, Fig. 3), said bit-map data being suitable for display said bit-map data received from said digital video disc player ; and combining (blending) the decoded program content stream and bitmap subpicture data to produce a signal representative of a combined image suitable for display (column 4, lines 53-65).

Regarding claims 2 and 4, Gadre further teaches the updating of the subpicture by processing the subpicture menu and highlight information (column 4, lines 35-68, column 8).

4. Claims 1-2 and 10-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakai et al (5,999,698).

Regarding claim 1, Nakai discloses a method for operating a digital video player (10,50,54) interconnected by a digital bus to a digital video processing apparatus (58,62,64) , the digital video processing apparatus performing the steps, of

receiving (58) from a digital video player a program content stream (MPEG stream) representative of a programmed event, said program content stream including data in a compressed format ;

Art Unit: 2615

decoding (58) said program content stream in said digital apparatus;
receiving (62) from said digital video player bit-map data representative of a subpicture associated with said program content stream (column 21); and
combining (mixing) the decoded program content stream and bitmap subpicture data to produce a signal representative of a combined image suitable for display (column 22, lines 65 to column 23, line 10).

Regarding claim 10, Nakai discloses a digital video disc player that comprises a combination of components 10,30,200,) interconnected by a digital bus to a digital video processing apparatus (64) the digital video disc player (Figs. 4, 5, column 6, lines 58-61) performing the steps of

retrieving from the storage device (10) coupled to the digital video disc a program content stream representative a video program in a compressed format

formatting the program content (decoding) for transfer mechanism (bus connected between the decoder and the digital processing apparatus 64) ;

retrieving from the storage device (10) coupled to the digital video disc compressed subpicture information ,

processing the subpicture information to generate bit map data representing subpicture data (column 21, lines 25-68); and

transmitting the bit map data to the digital video processing apparatus via a second mechanism of the digital data bus (bus connection between the subpicture decoder (62) and the digital processing apparatus (64) .

Regarding claims 2 and 11, Nakai further teaches

Art Unit: 2615

receiving a user initiated command in response to said displayed bit-mapped digital data (columns 21 and 72) ;

generating an updated subpicture stream in response to said user initiated command (columns 21 and 72);

In Remark applicant argues that "Nakai does not teaches a method for controlling digital processing apparatus that is connected to and distinct from a video disc player . In response, the examiner disagrees . It is noted that Nakai teaches a reproduction apparatus that comprises a digital disc player and a digital processing apparatus . Since claims recite a disc player but falls to specify the component of the digital disc player therefore the combination of components disc 10, disc drive as shown in figure 1 of Nakai is considered as the claimed digital disc player that is interconnected to a digital processing via a bus (mans for transferring the video program content and subpicture data .

5. Claims 1-4 and 8-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Komeno (6,351,599).

Regarding claims 1 and 3 , Komeno discloses a method for operating a digital video player (14) interconnected by a digital bus to a digital video processing apparatus (11) , the digital video processing apparatus performing the steps, of

receiving from a digital video player a program content stream representative of a programmed event, said program content stream including data in a compressed format ;

Art Unit: 2615

decoding (13) said program content stream in said digital apparatus to generate a suitable display image ;

receiving from said digital video player bit-map data representative of a subpicture (menu information) associated with said program content stream (menu), the bit-map data being suitable for display said bit-map data received from said digital video disc player (column 4, lines 1-11); and combining (12d,12a) the decoded program content stream and bitmap subpicture data to produce a signal representative of a combined image suitable for display (column 3, lines 5-31).

Regarding claim 10 , Komeno discloses a method for operating a digital video player (14) interconnected by a digital bus to a digital video processing apparatus (DTV 11) , the digital video processing apparatus performing the steps, of

receiving from a digital video player a program content stream representative of a programmed event, said program content stream including data in a compressed format (column 4, lines 1-11);

formatting the program content stream and transferring the formatted program content the digital apparatus via a first transfer mechanism (column 5, lines 5-35);

receiving from said digital video player bit-map data representative of a subpicture associated with said program content stream (menu picture , Figs. 1-2) ;

Art Unit: 2615

transferring the bitmap subpicture to the digital apparatus via second transfer mechanism (Fig. 1) .

Regarding claims 2,4 and 11, Komeno further teaches updating the subpicture data since the subpicture data comprises the subtitle and information related to the program can be generated under user control.

Regarding claim 12, Kamenno teaches the first mechanism is isochroous transfer mechanism since the first transfer is used for transferring the program content and the second mechanisms is asynchronous mechanism because the second transfer mechanism is used fro transferring the subpicture data generated under user control .

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a

Art Unit: 2615

later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-4 and 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stahl et al (6,665,020) in view of Chung (6,507,696).

Regarding claims 1,3,10, Stahl discloses a method for operating a digital video player (12) interconnected by a digital bus to a digital video processing apparatus (DTV 14, Fig. 4), the digital video processing apparatus performing the steps, of

receiving from a digital video player a program content stream (MPEG stream) representative of a programmed event, said program content stream including data in a compressed format ;

decoding (MPEG decoder) said program content stream in said digital apparatus;

receiving from said digital video player bit-map data representative of a subpicture associated with said program content stream (bitmapped menu), the bit-map data being suitable for display said bit-map data received from said digital video disc player ; and combining (overlay) the decoded program content stream and bitmap subpicture data to produce a signal representative of a combined image suitable for display (column 3, lines 5-31).

Further for claims 10 and 12, Stahl teaches the program content
Regarding claims 2,4 and 11, Stahl further teaches the updating of the subpicture (column 8, lines 30-53)..

Art Unit: 2615

Regarding claim 8 and 9, Stahl further teaches that the program content is transferred to the apparatus by isochronous mechanism and subpicture data is transferred by asynchronous transfer mechanism.

Stahl fails to teach that the digital player is a digital disc player.

However, it is noted that receiving program content and subpicture data from a disc player is well known in the art as taught by Chung (Fig. 1, column 2, lines 30-40). Therefore, it would have been obvious to one ordinary skill in the art to modify Stahl with Chung by using the teaching of Chung for providing the apparatus of Stahl with a DVD interface for receiving the subpicture and program content from a DVD player therefore enhancing the capacity of the apparatus of Stahl in additionally receiving the data from a DVD player.

8. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yanagihara (6,211,800) in view of Kitamura et al (6,031,963).

Regarding claims 1 and 3 Yanagihara discloses a method for operating a digital video disc player (71) interconnected by a digital bus to a digital video processing apparatus (12, presentation engine) Figs. 3, 5, the digital video processing apparatus performing the steps, of

(a) receiving from a digital video disc player a program content stream representative of a programmed event via digital bus, said program content stream including data in a compressed format (column 1, lines 5-10);

(b) decoding (33) said program content stream in the digital video processing apparatus;

Art Unit: 2615

receiving from said digital video disc player subpicture data (SP data) associated the decoded video data to provide a image suitable for display via the digital bus ;

combining the subpicture data and the decoded data content stream to produce a signal representative the combined image suitable for display (column 2, lines 44-57, column 5, lines 65-67).

Yanagihara fails to specifically teaches that teaches using bitmap for generating the subpicture data . However, it is noted that using a bit map for processing the subpicture data is well known in the art as taught by Katimura (columns 1 and 4) .Therefore, it would have been obvious to one of ordinary skill in the art to modify Yanagihara with Nakai by providing the bitmap means for processing the subpicture as bit map thereby enhancing the capacity of Yanagihara in controlling displaying the subpicture data .

Regarding claims 2 and 4, Yanagihara as modified with Kitamura further teaches updating of the subpicture (column 21, lines 25-65) by processing the subpicture menu, highlight and color change of the subpicture (columns 41-42).

9. Claims 5 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Komeno (6,351,599) in view of Yanagihara et al (6,211,800)

Regarding claim 5, Kamenno discloses a method for operating a digital video disc player (11) interconnected by a digital bus to a digital video processing apparatus (TV 12, Fig. 1-2) , the digital video processing apparatus performing the steps, of

Art Unit: 2615

(a) receiving from a digital video disc player a MPEG PS (stored on DVD) through a first channel ;

(c) receiving from said digital video disc player bit-map data representative of a subpicture (menu) associated with said program content stream through a second channel , said bit-map data being suitable for display said bit-map data received from said digital video disc player .

Komeno fails to teaches that the MPEG PS is converting to a MPEG TS and transferring the MPEG-TS through a isochroous channel .

Yanagihara teaches a digital disc player having a converter for converting a MPEG PS to a MPEG TS through a isochronous channel (Fig. 5,column 6, lines 14-20).

It would have been obvious to on of ordinary skill in the at to modify Kamenno with Yanagihara by using a converter with the apparatus of Kamenno for converting the MPEG- PS to a MPEG- TS and transferred the MPEG- TS and subpicture data via isochronous channel and asynchronous channel thereby enhancing the capacity and function of the apparatus.

Regarding claim 7, Komeno further teaches updating the subpicture data since the subpicture data comprises the subtitle and information related to the program can be generated under user control

Regarding claims 8 and 9, Komeno as modified with Yanagihara further teaches using a 1334 bus having isochronous and asynchronous mechanisms for transferring the program content and subpicture data .

Art Unit: 2615

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUY T NGUYEN whose telephone number is (703) 305-4775. The examiner can normally be reached on 8:30AM -6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Christensen can be reached on (703) 308-9644. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2615

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


HUY NGUYEN
PRIMARY EXAMINER

H.N